A. A. Wanek
Raton coal field
New Mexico
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--Open file 1962-

U. S. GEOLOGICAL SURVEY

E X P L A N A T I O N

SURFICIAL DEPOSITS
Unconsolidated deposits of silt, sand, gravel, boulders, and rock detritus

Pleistocene and Recent — QUATERNARY

Qal

Alluvium
Soil, sand, and gravel of alluvial origin

Qc

Colluvium
Heterogeneous rock detritus such as talus and landslide material

Qtg

High-level terrace and pediment gravels
Gravel and boulder deposits of alluvial origin on high surfaces

IGNEOUS ROCKS

QTb

Basalt
In dikes

QUATERNARY AND TERTIARY

Ti

Dacite and dacite porphyry
In sills and dikes

TERTIARY

SEDIMENTARY ROCKS

Paleocene — TERTIARY

Tpc

Poison Canyon Formation
Massive cliff-forming buff cross-laminated coarse-grained arkosic sandstone intercalated with grit conglomerate beds and thick silty yellow shale; 0-1,500± feet thick. Intertongues with Raton Formation

TKr

Raton Formation
Gray to buff cross-laminated fine- to medium-grained sandstone and dark-gray carbonaceous shale and thin coal beds; 0-1,400± feet thick. Includes a sequence of massive cliff-forming sandstone and a few thin coal beds 800-1,000± feet thick, underlain by sandstone, carbonaceous shale, and thin coal beds 300± feet thick, and a basal conglomerate 10-40± feet thick. Heavy line indicates coal bed. Intertongues with Poison Canyon Formation

Upper Cretaceous — CRETACEOUS

Kv

Vermejo Formation
Buff to gray and gray-green sandstone, dark-gray to black carboniferous shale, and thick coal beds; 0-221± feet thick. Intertongues with Trinidad Sandstone. Heavy line indicates coal bed or coal zone

Kt

Trinidad Sandstone
Massive cliff-forming light- to dark gray, cross-laminated fine- to medium-grained marine sandstone which contains abundant Halymenitis major Lesquereux; 80-100± feet thick. Intertongues with Vermejo Formation. Line indicates thin interval of coal beds and coal shale that split the Trinidad into upper and lower sandstone units, and which is an extension of the mapped tongue of the Vermejo Formation

Kpn

Pierre Shale and Niobrara Formation
Soft dark-gray marine shale which in the upper part contains several horizons of calcareous concretions; 2,700± feet thick. Upper 1,700 feet is of Pierre age and the lower 1,000 feet is of Niobrara age. Intertongues with base of Trinidad Sandstone

Contact
Dashed where indefinite

5

Coal bed or coal zone
Dashed where approximately located. Brackets in Vermejo Formation indicate number and linear extent of coal beds within zone

D / U

Normal fault
Dashed where approximately located.
U, upthrown side; D, downthrown side

T 20

Strike and dip of beds

6000

Structure contours
Approximately located, drawn on top of Trinidad Sandstone. Contour interval 100 feet. Datum is sea level

Coal mine

37 TD4709

Abandoned oil and gas test well
TD4709, total depth in feet; 37, number refers to coal or stratigraphic section

E

Stratigraphic section

X 25

Coal section